

ROSE MOSAIC IN FLORIDA

C. P. Seymour

Rose mosaic has been found to be quite prevalent in commercial and home plantings of Florida roses. This virus disease is reportedly found in all of the commonly used rootstocks. Rose mosaic has also been reported to have wide distribution in greenhouse and home plantings from the eastern seaboard and central states and with less frequency from the western states. Roses affected with mosaic may have less vigor and reduced bloom production. There is considerable variation in susceptibility to this virus among different varieties. The virus is spread only by grafting and budding. No insect transmission has been demonstrated to date.

SYMPTOMS. Rose mosaic is characterized by chlorotic leaf spots which tend to feather out in erratic wavy line patterns when associated with the veins (Fig. 1). The leaf blade around the spots may become distorted. Rings, water-marks, and oak leaf (Fig. 2) patterns are also common. Another type of rose mosaic, yellow mosaic, is characterized by brighter and lighter yellow patterns, but the relationship of these two types is not clear.



Fig. 1. Typical rose mosaic showing erratic wavy line patterns.

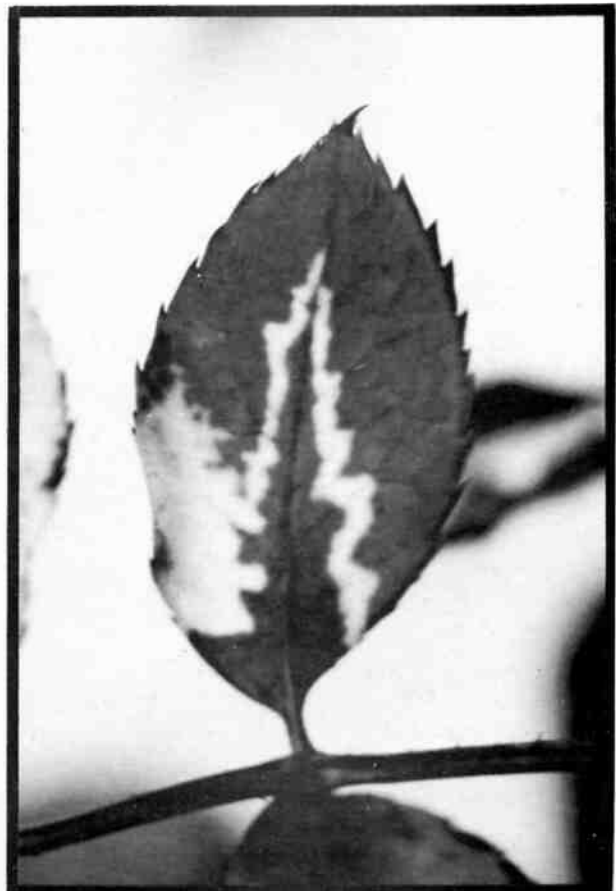


Fig. 2. Oak leaf pattern.

CONTROL. Since the virus is transmitted by propagative wood, only disease-free rootstock and healthy budding and grafting material must be used. Mosaic infected rosebushes held at 94 F for 4 weeks followed by 2 weeks at 97 F have been successfully freed of this virus. However, this procedure is recommended only for highly valuable rootstocks or varietal material and not considered to be practical as a routine treatment for commercial rose stocks.

Literature Cited

1. Brierley, P. 1953. Viruses on roses, p. 637-639. In U.S. Dep. Agr. Yearbook of agriculture. U.S. Government Printing Office, Washington, D.C.
2. Dodge, B. O. 1960. Virus diseases, p. 632. In Diseases and pests of ornamental plants. 3rd ed. Ronald Press, New York.
3. Forsberg, J. L. 1963. Mosaics, p. 146-148. In Diseases of ornamental plants. Univ. Illinois Coll. Agr. Special Publication No. 3.
4. U.S. Dep. Agr. Handbook No. 165. 1960. Rosa. Native species, p. 406. In Index of plant diseases in the United States. U.S. Government Printing Office, Washington, D.C.
5. Westcott, Cynthia. 1950. Virus diseases, p. 383. In Plant disease handbook. D. Van Nostrand Co., New York.